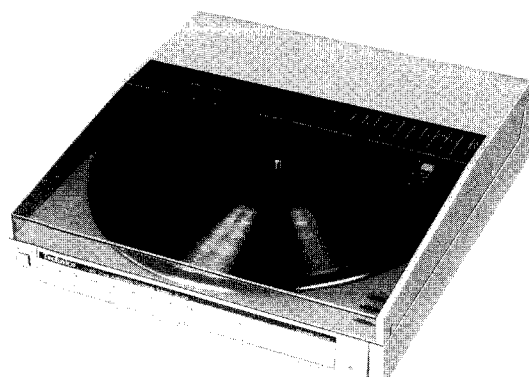


Service Manual

Quartz Direct Drive Automatic Turntable System

SL-Q6/(K)

[E], [EK], [XL], [EG], [EB],
[EH], [EF], [Ei], [EC], [XA],
[XM], [PA], [PE], [PC]



is the standard mark for plug-in-connector type.

Products carrying this mark are interchangeable and adaptable among each other.

*The colors of this model include silver and black.

*The black type model is provided with (K) in the Service Manual.

Areas

- * [E] is available in Switzerland and Scandinavia.
- * [EK] is available in United Kingdom.
- * [XL] is available in Australia.
- * [EG] is available in F.R. Germany.
- * [EB] is available in Belgium.
- * [EH] is available in Holland.
- * [EF] is available in France.
- * [Ei] is available in Italy.
- * [EC] is available in Czechoslovakia.
- * [XA] is available in Southeast Asia, Oceania, Africa, Middle Near East and Central South America.
- * [XM] is available in Central South America.
- * [PA] is available in far East PX.
- * [PE] is available in European Military.
- * [PC] is available in European Audio Club.

Please use this manual together with the service manual for Model No. SL-Q6, Order No. DAD83110039C1.

English

Specifications

Specifications are subject to change without notice for further improvement.
Weight and dimensions shown are approximate.

■ General

Power supply:	For United Kingdom and Australia: 240V AC, 50Hz For continental Europe: 220V AC, 50Hz For others: ~110-120/220-240V, 50 or 60 Hz
Power consumption:	12 W
Dimensions: (W × H × D)	31.5 × 8.8 × 31.5 cm (12-1/2" × 3-1/2" × 12-1/2") 31.5 × 39 × 31.5 cm (12-1/2" × 15-23/64" × 12-1/2") (Maximum height when top (dust cover) is open.)
Weight:	4.3 kg (9.5 lb.)

■ Turntable section

Type:	Direct drive Automatic turntable
Features:	Auto start/Auto lead-in Auto return Auto stop Programmable band selection Repeat play Auto speed select Manual speed selection possible Auto size select Record presence detection

Drive method:	Direct drive
Motor:	Brushless DC motor
Drive control method:	Quartz-phase-locked control
Turntable platter:	Aluminum die-cast Diameter 30 cm (12")
Turntable speeds:	33-1/3 rpm and 45 rpm Auto speed select (Manual selection possible)
Wow and flutter:	0.012% WRMS* 0.025% WRMS (JIS C5521) ± 0.035% peak (IEC 98A Weighted)

* Measured by obtaining signal from built-in frequency generator of motor assembly.

Rumble:	-56 dB (IEC 98A Unweighted) -78 dB (IEC 98A Weighted)
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■ Tonearm section

Type:	Dynamic balanced type Linear tracking tonearm 4-pivot gimbal suspension
Effective length:	10.5 cm (4-1/8")
Tracking error angle:	Within ± 0.1°
Effective mass:	9 g (including cartridge)
Resonance frequency:	12 Hz
Tonearm drive motor:	DC motor
Phono cable capacitance:	200 pF

Technics

Matsushita Electric Trading Co., Ltd.
P.O. Box 288, Central Osaka Japan

Panasonic Tokyo
Matsushita Electric Industrial Co., Ltd.
1-2, 1-chome, Shibakoen, Minato-ku, Tokyo 105 Japan

■ Cartridge section

Type:	Moving magnet stereo cartridge EPC-P28S (For [PA], [PE] and [PC] areas) EPC-P33S (For others)	Channel separation:	More than 22 dB at 1 kHz
Magnet circuit:	All laminated core	Channel balance:	Within 1.8 dB at 1 kHz
Frequency response:	10 Hz ~ 50 kHz 20 Hz ~ 10 kHz $\pm$ 1 dB	Recommended load impedance:	47 k Ω ~ 100 k Ω
Output voltage:	2.5 mV at 1 kHz, 5 cm/s, zero to peak lateral velocity (7 mV at 1 kHz, 10 cm/s, zero to peak 45° velocity [DIN 45 500])	Compliance (dynamic):	12 x 10 ⁻⁶ cm/dyne at 100 Hz
		Stylus pressure range:	1.25 $\pm$ 0.25 g (12.5 $\pm$ 2.5 mN)
		Weight:	6 g (cartridge only)
		Replacement stylus:	EPS-28ES (For [PA], [PE] and [PC] areas) EPS-33ES (For others) (Elliptical stylus)

- The power supply for this unit varies depending upon the areas. Also, the parts used for power supply are different. So, refer to the circuit diagram and the replacement parts list.
- ★ 220V (50/60 Hz) for Continental Europe.
- ★ 240V (50/60 Hz) for United Kingdom and Australia.
- ★ 110V-120V/220V-240V (50/60 Hz) for other areas.
- ★ [EK], [XA], [XM], [PA], [PE] and [PC] areas are provided with voltage selector.

TECHNISCHE DATEN

Änderungen der technischen Daten vorbehalten.
Die angegebenen Gewichts- und Abmessungsdaten sind circa Werte.

■ Allgemeine Daten

Stromversorgung:	~ 220V, 50 Hz Wechselstrom
Leistungsaufnahme:	12 W
Abmessungen: (B x H x T)	31,5 x 8,8 x 31,5 cm 31,5 x 39 x 31,5 cm (Maximale Höhe bei vollständig geöffnetem Gehäuseoberteil)
Gewicht:	4,3 kg

■ Plattenspieler

Typ:	Direktantriebener automatischer Plattenspieler Auto-Start/Auto-Zuführung Rückführautomatik Stopp-Automatik Programmierbare Musikstück-Auswahl Wiederhol-Betrieb Automatische Drehzahlwahl Manuelle Drehzahlwahl möglich Automatische Plattengrößewahl Plattenpräsenz-Registrierung
Antrieb:	Direktantrieb
Motor:	Kollektorloser Gleichstrommotor
Antriebsregel-Methode:	Quarz-Steuerung (QPL)
Plattenteller:	Aluminium-Druckguß Durchmesser 30 cm
Plattenteller-Drehzahlen:	33-1/3 und 45 U/min Automatische Drehzahlwahl (manuelle Wahl möglich)

Gleichlaufschwankungen:	0,012% WRMS* 0,025% WRMS (JIS C5521) $\pm$ 0,035% Spitze (IEC 98A bewertet)
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* Gemessen anhand von Signalen vom eingebauten Frequenzgenerator des Motorbauteils.

Rumpel-Fremdspannungsabstand:	-56 dB (IEC 98A unbewertet)
Rumpel-Geräuschspannungsabstand:	-78 dB (IEC 98A bewertet)

■ Tonarm

Typ:	Dynamisch ausbalancierter Tangential-Tonarm mit Kardanaufhängung mit 4-Punkt- Drehlager
Effektive Länge:	10,5 cm
Spurfehlwinkel:	Innerhalb $\pm$ 0,1°
Effektive Masse:	9 g (einschließlich Tonabnehmer)
Resonanzfrequenz:	12 Hz
Tonarm-Antriebsmotor:	Gleichstrommotor
Phonokabel-Kapazität:	200 pF

■ Tonabnehmer

Typ:	Stereo-Magnet-Tonabnehmer
Magnetkreis:	Ganzlamellenkern
Frequenzgang:	10 Hz bis 50 kHz 20 Hz bis 10 kHz $\pm$ 1 dB

Ausgangsspannung:	2,5 mV bei 1 kHz 5 cm/s. Null-zu-Spitze, lateral (7 mV bei 1 kHz 10 cm/s. Null-zu-Spitze, 45° [DIN 45 500])	Nachgiebigkeit (dynamisch):	12 x 10 ⁻⁶ cm/dyn bei 100 Hz
Kanaltrennung:	22 dB bei 1 kHz	Auflagekraft- Einstellbereich:	1,25 ± 0,25 g (12,5 ± 2,5 mN)
Kanalabweichung:	Innerhalb 1,8 dB bei 1 kHz	Gewicht:	6 g (nur Tonabnehmer)
Empfohlene Endimpedanz:	47 kΩ ~ 100 kΩ	Ersatznadel:	EPS-33ES (Elliptische Nadel)

Français

CARACTERISTIQUES

Les spécifications sont susceptibles d'être modifiées sans préavis.
Le poids et les dimensions donnés sont approximatifs.

■ Généralités

Alimentation:	Alternatif 220V, 50 Hz
Consommation:	12 W
Dimensions:	31,5 x 8,8 x 31,5 cm
(L x H x P)	31,5 x 39 x 31,5 cm (Hauteur maximum lorsque le dessus (couvercle protégépoussière) est ouvert.)
Poids:	4,3 kg

■ Platine de lecture

Type:	Entraînement direct Platine automatique Départ automatique/Entrée automatique Retour automatique Sélection de plages programmable Arrêt automatique Audition répétée Sélection de vitesse automatique Sélection automatique du diamètre Sélection de vitesse manuelle possible Détection de la présence d'un disque
Système d'entraînement:	Entraînement direct
Moteur:	Moteur C.C. sans balai

Système de commande d'entraînement:	Réglage d'accrochage de phase par quartz
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Plateau de lecture:	Aluminium moulé sous pression Diamètre 30 cm
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Vitesses de la platine:	33-1/3 et 45 t/p.m. Sélecteur de vitesse automatique (Sélection manuelle possible)
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Pleurage et scintillement:	0,012% de valeur efficace* 0,025% de valeur efficace (JIS C5521) ± 0,035% de crête (IEC 98A Pondéré)
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* Mesuré par l'obtention d'un signal provenant du générateur
de fréquences incorporé de l'ensemble du moteur.

Ronflement:	-56 dB (IEC 98A Non Pondéré) -78 dB (IEC 98A Pondéré)
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■ Bras de lecture

Type:	Bras de lecture d'alignement linéaire de type à équilibre dynamique avec suspension à la cardan à 4 pivots
Longueur effective:	105 mm
Angle d'erreur de piste:	En deçà de $\pm 0,1^\circ$
Masse réelle:	9 g (y compris la cellule pick-up)
Fréquence de résonance:	12 Hz
Moteur d'entraînement du bras de lecture:	Moteur C.C.
Capacitance du câble phono:	200 pF

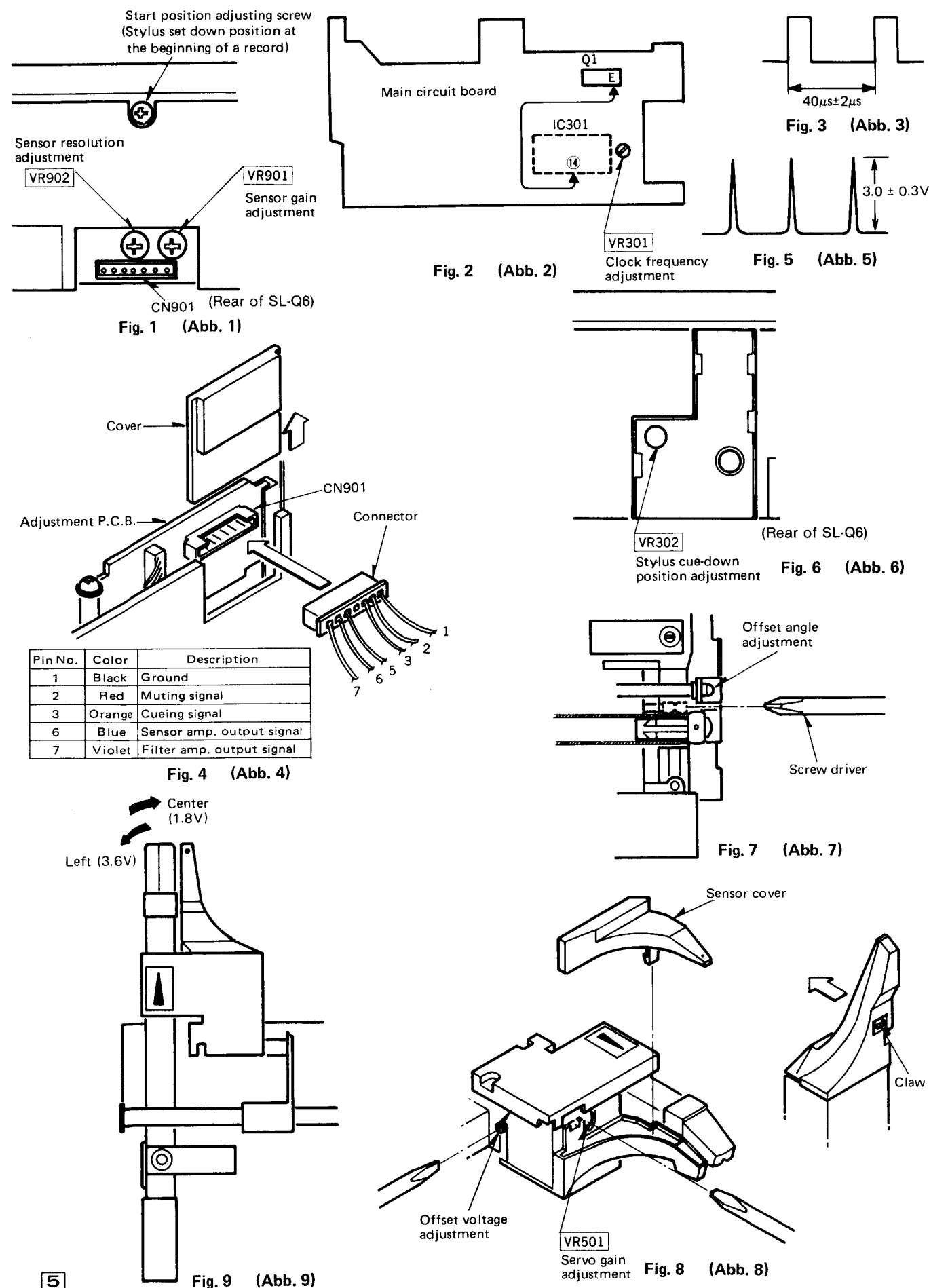
■ Cellule pick-up

Type:	Cellule pick-up stéréo à aimant mobile
Circuit magnétique:	Noyau entièrement feuilleté
Réponse en fréquence:	10 Hz à 50 kHz 20 Hz à 10 kHz ± 1 dB 2,5 mV à 1 kHz; 5 cm/s. zéro à vitesse latérale de crête (7 mV à 1 kHz; 10 cm/s. zéro à vitesse 45° de crête [DIN 45 000])
Tension de sortie:	22 dB à 1 kHz En deçà de 1,8 dB à 1 kHz
Séparation des canaux:	22 dB à 1 kHz
Equilibrage des canaux:	En deçà de 1,8 dB à 1 kHz
Impédance de charge recommandée:	47 k Ω ~ 100 k Ω
Elasticité (dynamique):	12 x 10 ⁻⁶ cm/dyne à 100 Hz
Plage de la force verticale d'appui:	1,25 $\pm$ 0,25 g (12,5 $\pm$ 2,5 mN)
Poids:	6 g (cellule seule)
Remplacement de la pointe de lecture:	EPS-33ES (Forme elliptique)

Español

ESPECIFICACIONES		Las especificaciones quedan sujetas a cambios sin aviso previo. Los pesos y las dimensiones indicados son aproximativos.	
■ En general		■ Sección del brazo sonoro	
Alimentación de corriente:	~ 110-120/220-240V, 50 ó 60 Hz	Tipo:	Brazo sonoro de seguimiento lineal de tipo con equilibrio dinámico con suspensión cardánica de 4-pivotes 10,5 cm
Consumo de corriente:	12 W	Longitud efectiva:	
Dimensiones: (Ancho x Alto x Prof.)	31,5 x 8,8 x 31,5 cm 31,5 x 39 x 31,5 cm (Altura máxima cuando la parte de arriba(tapa contra el polvo)está abierta.)	Angulo de error de seguimiento:	Inferiro a ± 0,1° aproxim.
Peso:	4,3 kg	Masa efectiva:	9 g (incluyendo el cartucho)
■ Sección del plato giratorio		Frecuencia de resonancia:	12 Hz
Tipo:	Accionamiento directo Plato giratorio automático Arranque automático/Comienzo automático Retorno automático Parada automática Selección programable de bandas Ejecución repetida Selección automática de la velocidad Es posible seleccionar la velocidad a mano Selección automática del tamaño Detección de presencia de disco	Motor de accionamiento del brazo sonoro:	Motor de corriente continua
Método de accionamiento:	Accionamiento directo	Capitancia del cable del fonógrafo:	200 pF
Motor:	Motor de corriente continua sin escobillas	■ Sección del cartucho	
Método de control de accionamiento:	Control enclavado de fase de cuarzo	Tipo:	Cartucho estereofónico de imán móvil
Platillo del plato giratorio:	Aluminio fundido 30 cm de diámetro	Circuito magnético:	Núcleo totalmente laminado
Velocidades del plato giratorio:	33-1/3 y 45 rpm Selección automática de la velocidad (También posibilidad de seleccionar a mano)	Respuesta de frecuencia:	10 Hz a 50 kHz 20 Hz a 10 kHz ± 1 dB 2,5 mV a 1 kHz Velocidad lateral de cero a cresta de 5 cm/s. (7 mV a 1 kHz. Velocidad de 45° de cero a cresta de 10 cm/s. [DIN 45 000])
Ululaciones y trémolo:	0,012% WRMS* 0,025% WRMS (JIS C5521) ± 0,035% cresta (IEC 98A Ponderado)	Voltaje de salida:	22 dB a 1 kHz Inferior a 1,8 dB a 1 kHz
Ruido de rodadura:	—56 dB (IEC 98A Non ponderado) —78 dB (IEC 98A ponderado)	Separación de canales:	22 dB a 1 kHz
		Equilibrio de canales:	Inferior a 1,8 dB a 1 kHz
		Impedancia de carga recomendada:	47 kΩ a 100 kΩ
		Elasticidad (dinámica):	12 x 10 ⁻⁶ cm/dina a 100 Hz
		Radio de presión de la aguja:	1,25 ± 0,25 g (12,5 ± 2,5 mN)
		Peso:	6 g (cartucho solamente)
		Aguja de recambio:	EPS-33ES (Aguja eliptica)

■ ADJUSTMENT POINTS



■ MEASUREMENTS AND ADJUSTMENTS English

• Equipment used and condition of the set

- Oscilloscope (two channels)
- DC voltmeter.
- Record (SFTR007) for adjustment.
- Connector (SZZP1010F) for adjustment.
- Set the optical sensor sensitivity selector to "M".

Step	Item	Preparations for adjustment	Adjusting portion	Adjusting method
1	Start position	- Open the upper cabinet and put on the record. - Turn the power switch on. - Push the "Start" switch.	Start position adjusting screw. (Fig. 1)	Turn the start position adjusting screw. If it descends between tunes, turn the screw counter clockwise.
2	Clock frequency	- Connect Q1 emitter to IC301 14-pin. (Fig. 2) - Connect the oscilloscope to IC301 13-pin.	VR301 (Fig. 2)	- Turn the power switch on. - Adjust VR301 so that the cycle of output waveform is $40\mu s \pm 2\mu s$ (Fig. 3)
3	Sensor gain	- Remove the cover and insert the connector for adjustment into terminal CN901. (Fig. 4) - Connect the oscilloscope to 6-pin (+) and 1-pin (-). - Put on the record for adjustment with side A up.	VR901 (Fig. 1)	- Turn the power switch on. - Tonearm is on the rest position. (Blank area of the record.) - Adjust VR901 so that the output voltage is $4V \pm 0.4V$.
4	Sensor resolution	- Remove the cover insert the connector for adjustment into terminal CN901. (Fig. 4) - Connect the oscilloscope to 7-pin (+) and 1-pin (-). - Put on the record for adjustment with side A up.	VR902 (Fig. 1)	- Turn the power switch on. - Push the program key 2 to let it search the tonearm. (Output is delivered between the tunes.) - between tunes is $3V \pm 0.3V$. (Fig. 5)
5	Stylus cue-down position	- Open the upper cabinet and hold the cabinet switch with tape. - Put on the record for adjustment with side B up. - Close the upper cabinet. - Connect the unit to the amplifier. (Connect the speakers to the speaker terminals.)	VR302 (Fig. 6)	- Turn the power switch on. - Push the program key 2, followed by start switch. - After completion of cueing down, push the program key 2 for the purpose of skipping. - Make sure that descending position is at count "18 ~ 19". - Adjust VR302 so that the descending position is at count 18 ~ 19".
6	Tonearm offset angle	- Open the upper cabinet and hold the cabinet switch with tape. - Close the upper cabinet.	Adjusting screw (Fig. 7)	- Turn the power switch on and push the start switch to shift the tonearm inward. - Open the upper cabinet. - Turn the adjusting screw so that the arm center matches the V-groove of the lift bar.
7	Servo gain and offset voltage	- Open the upper cabinet and hold the cabinet switch with the tape. - Close the upper cabinet. - Connect the DC voltmeter to CN301 terminal 5 and ground terminal. - Remove the sensor cover (Fig. 8)	VR501 (Servo gain) Screw (Offset voltage) (Fig. 8, 9)	- Turn the power switch on and push the start switch to shift the tonearm inward. - Open the upper cabinet. - Completely shift the tonearm to the left. Then, adjust VR501 so that the voltage is 3.6V. (Servo gain) - Set the tonearm to the center and make sure that the output voltage is 1.8V. - If the voltage is not 1.8V, adjust screw so that the output voltage is 1.8V. (Offset voltage)

MESSUNGEN UND JUSTIERUNGEN Deutsch

Zu verwendende Instrumente und Einstellungen am Gerät

1. Oszilloskop (zwei Kanäle)

2. Gleichstrom-Voltmeter

3. Schallplatte (SFTR007) für die Abstimmung
4. Anschluß (SZZP1010F) für die Abstimmung

5. Den Empfindlichkeits-Wahlschalter für den Optischen Sensor auf "M" stellen.

Schritt	Posten	Vorbereitungen für die Justierung	Zu justierende Teile	Justiermethode
1	Startposition	1. Das Gehäuseoberteil öffnen und die Schallplatte auflegen. 2. Den Netzschalter einschalten. 3. Den Start-Schalter drücken.	Startposition-Justierschraube (Abb. 1)	1. Die Startposition-Justierschraube drehen. Falls die Nadel im bespielten Teil aufsetzt, die Schraube entgegen dem Uhrzeigersinn drehen.
2	Taktgeber-Frequenz	1. Den Emitter Q1 an Stift 14 von IC301 anschließen (Abb. 2). 2. Das Oszilloskop an Stift 13 von IC301 anschließen.	VR301 (Abb. 2)	1. Den Netzschalter einschalten. 2. VR301 so justieren, daß der Zyklus der Ausgangswellenform $40\mu s \pm 2\mu s$ beträgt (Abb. 3).
3	Sensor-Verstärkungs-grad	1. Die Abdeckung entfernen und den Anschluß für die Abstimmung in den Anschluß CN901 einstecken. (Abb. 4) 2. Das Oszilloskop an Stift 6 (+) und Stift 1 (–) anschließen. 3. Die Schallplatte für die Abstimmung (A-Seite) auflegen.	VR901 (Abb. 1)	1. Den Netzschalter einschalten. 2. Der Tonarm ist in der Ruheposition. (Leerteil der Platte) 3. VR901 so justieren, daß die Ausgangsspannung $4V \pm 0,4V$ beträgt.
4	Sensor-Auflösung	1. Die Abdeckung entfernen und den Anschluß für die Abstimmung in den Anschluß CN901 einstecken. (Abb. 4) 2. Das Oszilloskop an Stift 7 (+) und Stift 1 (–) anschließen. 3. Die Schallplatte für die Abstimmung (A-Seite) auflegen.	VR902 (Abb. 1)	1. Den Netzschalter einschalten. 2. Die Programmtaste drücken, damit der Tonarm mit der Suche beginnt. (Zwischen den Musikstücken wird eine Ausgangsleistung gespeist.) 3. VR902 so justieren, daß die Spitze der Ausgangsleistung zwischen zwei Musikstücken $3V \pm 0,3V$ beträgt. (Abb. 5)
5	Nadel-Absenkposition	1. Das Gehäuseoberteil öffnen und den Gehäuseschalter in der gedrückten Stellung mit Klebeband fixieren. 2. Die Schallplatte für die Abstimmung (B-Seite) auflegen. 3. Das Gehäuseoberteil schließen. 4. Den Plattenspieler an den Verstärker anschließen. (Die Lautsprecher an die Lautsprecher-Anschlüsse anschließen.)	VR302 (Abb. 6)	1. Den Netzschalter einschalten. 2. Die Programmtaste 2 und anschließend den Start-Schalter drücken. 3. Nach erfolgtem Absenken der Nadel die Programmtaste 2 drücken, um das Stück zu überspringen. 4. Überprüfen, ob die Nadel bei der Position "18 – 19" abgesenkt wird. 5. VR302 so justieren, daß die Nadel bei Position "18 – 19" abgesenkt wird.
6	Tonarmwinkel	1. Das Gehäuseoberteil öffnen und den Gehäuseschalter in der gedrückten Stellung mit Klebeband fixieren. 2. Das Gehäuseoberteil schließen.	Justierschraube (Abb. 7)	1. Den Netzschalter einschalten und den Start-Schalter drücken, um den Tonarm nach innen zu bewegen. 2. Das Gehäuseoberteil öffnen. 3. Die Justierschraube so drehen, daß die Mittellinie des Tonarm mit der V-Kerbe der Liftstange übereinstimmt.
7	Servo-Verstärkung und Offset-Spannung	1. Das Gehäuseoberteil öffnen und den Gehäuseschalter in der gedrückten Stellung mit Klebeband fixieren. 2. Das Gehäuseoberteil schließen. 3. Das Gleichstrom-Voltmeter an CN301, Anschluß 5 und den Erdungsanschluß (Masse) anschließen. 4. Die Sensor-Abdeckung entfernen (Abb. 8).	VR501 (Servoverstärkung) Schraube (Offset-Spannung) (Abb. 7, 8)	1. Den Netzschalter einschalten und den Start-Schalter drücken, um den Tonarm nach innen zu bewegen. 2. Das Gehäuseoberteil öffnen. 3. Den Tonarm vollständig nach links bewegen. Anschließend VR501 so justieren, daß die Spannung $3,6V$ beträgt. (Servo-Verstärkung) 4. Den Tonarm in die Mitte stellen und überprüfen, daß die Ausgangsspannung $1,8V$ beträgt. 5. Falls die Spannung nicht $1,8V$ beträgt, ist die Schraube so zu drehen, bis die Ausgangsspannung $1,8V$ beträgt. (Offset-Spannung)

MESURAGES ET RÉGLAGES Français

Appareillage utilise et condition de l'appareil

1. Oscilloscope (deux canaux).

2. Voltmètre à C.C.

3. Disque (SFTR007) pour la mise au point.
4. Connecteur (SZZP1010F) pour l'ajustement.

5. Régler le sélecteur de sensibilité du détecteur optique sur "M".

Etape	Article	Préparatifs pour le réglage	Partie à régler	Méthode de réglage
1	Position de démarrage	1. Ouvrir le boîtier supérieur et placer le disque. 2. Mettre en circuit le commutateur d'alimentation. 3. Appuyer sur le commutateur "Start" (démarrage).	Vis de réglage du positionnement de démarrage. (Fig. 1)	1. Tourner la vis de réglage du positionnement de démarrage. 2. Si elle s'abaisse entre les plages musicales, tourner la vis dans le sens inverse des aiguilles d'une montre.
2	Fréq. des impulsions de rythme	1. Raccorder l'émetteur Q1 à la broche à 14 pôles IC301. 2. Raccorder l'oscilloscope à la broche à 13 pôles IC301.	VR301 (Fig. 2)	1. Mettre en circuit le commutateur d'alimentation. 2. Ajuster VR301 de telle sorte que le cycle de la forme d'onde de sortie soit de $40\mu s \pm 2\mu s$. (Fig. 3)
3	Gain du dispositif détecteur	1. Retirer le couvercle et insérer le connecteur pour le réglage dans la borne CN901. (Fig. 4) 2. Raccorder l'oscilloscope à la broche hexapolaire (+) et à la broche unipolaire (–). 3. Placer le disque pour la mise au point avec la face A vers le haut.	VR901 (Fig. 1)	1. Mettre en circuit le commutateur d'alimentation. 2. Le bras de lecture est sur la position d'intermission. (Zone vierge du disque) 3. Ajuster VR901 de telle sorte que la tension de sortie soit de $4V \pm 0,4V$.
4	Résolution du dispositif détecteur	1. Retirer le couvercle et insérer le connecteur pour le réglage dans la borne CN901. (Fig. 4) 2. Raccorder l'oscilloscope à la broche heptapolaire (+) et à la broche unipolaire (–). 3. Placer le disque pour la mise au point avec la face A vers le haut.	VR902 (Fig. 1)	1. Mettre en circuit le commutateur d'alimentation. 2. Appuyer sur la touche de programmation pour la laisser rechercher le bras de lecture. (La puissance de sortie est livrée entre les plages musicales.) 3. Ajuster VR902 de telle sorte que la puissance de sortie de crête entre les plages musicales soit de $3V \pm 0,3V$. (Fig. 5)
5	Position de repérage/pose de la pointe de lecture	1. Ouvrir le boîtier supérieur et maintenir le commutateur du boîtier avec une bande adhésive. 2. Placer le disque pour la mise au point avec la face B vers le haut. 3. Refermer le boîtier supérieur. 4. Raccorder l'appareil à l'amplificateur. (Raccorder les haut-parleurs aux bornes des haut-parleurs.)	VR302 (Fig. 6)	1. Mettre en circuit le commutateur d'alimentation. 2. Appuyer à la suite sur la touche de programmation 2, puis sur la touche de mise en route. 3. Après l'achèvement du repérage/pose, appuyer sur la touche de programmation 2 en vue du saut d'espacement. 4. S'assurer que la position descendante est au compte de "18 – 19". 5. Régler VR302 de telle sorte que la position descendante soit au compte de "18 – 19".
6	Angle de décalage du bras de lecture	1. Ouvrir le boîtier supérieur et maintenir le commutateur de boîtier avec une bande adhésive. 2. Refermer le boîtier supérieur.	Vis de réglage (Fig. 7)	1. Mettre en circuit le commutateur d'alimentation et appuyer sur le commutateur de démarrage pour déplacer le bras de lecture vers l'intérieur. 2. Ouvrir le boîtier supérieur. 3. Tourner la vis de réglage de telle sorte que le centre du bras coïncide avec la rainure en V de la tige d'élévation.
7	Amplif. Servo-mécanique et tension de suppression	1. Ouvrir le boîtier supérieur et maintenir le commutateur du boîtier avec une bande adhésive. 2. Refermer le boîtier supérieur. 3. Raccorder le voltmètre à C.C. à la borne CN301 et à la borne de mise à la terre. 4. Retirer la coiffe du dispositif détecteur. (Fig. 8)	VR501 – (Amplif. Servo-mécanique) Vis – (tension de suppression) (Figs. 8, 9)	1. Mettre en circuit le commutateur d'alimentation et appuyer sur le commutateur de démarrage pour déplacer le bras de lecture vers l'intérieur. 2. Ouvrir le boîtier supérieur. 3. Déplacer complètement le bras de lecture vers la gauche. Puis, ajuster VR501 de telle sorte que la tension soit de $3,6V$. (Amplification servo-mécanique) 4. Placer le bras de lecture au centre et s'assurer que la tension de sortie soit de $1,8V$. 5. Si la tension n'est pas de $1,8V$, ajuster la vis de telle sorte que la tension de sortie soit de $1,8V$. (Tension de suppression)

MEDICIONES Y AJUSTE Español

Equipo usado y condición del aparato.

1. Osciloscopio (dos canales) 4. Conector (SZZP1010F) para ajuste.
2. Voltímetro de CC. 5. Poner el selector de sensibilidad de sensor óptico en "M".
3. Disco (SFTR007) para ajuste.

Paso	Artículo	Preparaciones para ajuste	Porción de ajuste	Método de ajuste
1	Posición de arranque	1. Abrir el gabinete superior y colocar el disco. 2. Encender el interruptor de corriente. 3. Apretar el interruptor de "Arranque".	Tornillo de ajuste de posición de arranque. (Fig. 1)	1. Girar el tornillo de ajuste de posición de arranque. Si desciende entre tonadas, girar el tornillo a la izquierda.
2	Frecuencia de reloj	1. Conectar emisor Q1 a perno-14 IC301. (Fig. 2) 2. Conectar el osciloscopio a perno-13 IC301.	VR301 (Fig. 2)	1. Encender el interruptor de corriente. 2. Ajustar VR301 de manera que el ciclo de forma de onda de salida sea $40\mu s \pm 2\mu s$. (Fig. 3)
3	Ganancia de sensor	1. Remover la cubierta e insertar el conector para ajuste en terminal CN901. (Fig. 4) 2. Conectar el osciloscopio a perno-6 (+) y perno-1 (-). 3. Colocar el disco para ajuste con el lado A arriba.	VR901 (Fig. 1)	1. Encender el interruptor de corriente. 2. El brazo fonocaptor está en la posición de descanso. (Área negra del disco.) 3. Ajustar VR901 de manera que el voltaje de salida sea $4V \pm 0,4V$.
4	Resolución de sensor	1. Remover la cubierta e insertar el conector para ajuste en terminal CN901 (Fig. 4). 2. Conectar el osciloscopio a perno-7 (+) y perno-1 (-). 3. Colocar el disco para ajuste con el lado A arriba.	VR902 (Fig. 1)	1. Encender el interruptor de corriente. 2. Apretar la tecla de programa para permitirla explorar el brazo fonocaptor. (Salida es suministrada entre las tonadas.) 3. Ajustar VR902 de manera que la salida de cresta entre tonadas sea $3V \pm 0,3V$. (Fig. 5).
5	Posición de apunte descendente (cue-down) de aguja	1. Abrir el gabinete superior y sujetar el interruptor de gabinete con cinta. 2. Colocar el disco para ajuste con el lado B arriba. 3. Cerrar el gabinete superior. 4. Conectar la unidad al amplificador (Conectar los altavoces a los terminales de altavoces.)	VR302 (Fig. 6)	1. Encender el interruptor de corriente. 2. Apretar la tecla de programa 2, seguido por el interruptor de arranque. 3. Después de completar el apunte descendente (cueing-down), apretar la tecla de programa 2 para el fin de salto de surco. 4. Asegurarse de que la posición descendente esté en conteo "18 — 19". 5. Ajustar VR302 de manera que la posición descendente esté en conteo "18 — 19".
6	Angulo de descentramiento de brazo de fonocaptor	1. Abrir el gabinete superior y sujetar el interruptor de gabinete con cinta. 2. Cerrar el gabinete superior.	Tornillo de ajuste (Fig. 7)	1. Encender el interruptor de corriente y apretar el interruptor de arranque para mover el brazo de fonocaptor hacia dentro. 2. Abrir el gabinete superior. 3. Girar el tornillo de ajuste de manera que el centro de brazo coincida con la ranura-V de la barra de alza.
7	Servogancia y contravoltaje	1. Abrir el gabinete superior y sujetar el interruptor de gabinete con cinta. 2. Cerrar el gabinete superior. 3. Conectar el voltímetro de CC a terminal 5 de CN301 y terminal de tierra. 4. Remover la cubierta de sensor (Fig. 8).	VR501 (Servogancia) Tornillo (Contravoltaje) (Fig. 8, 9)	1. Encender el interruptor de corriente y apretar el interruptor de arranque para mover el brazo de fonocaptor hacia dentro. 2. Abrir el gabinete superior. 3. Mover completamente el brazo de fonocaptor a la izquierda. Luego, ajustar VR501 de manera que el voltaje sea 3,6V. (Servogancia) 4. Fijar el brazo de fonocaptor en el centro y asegurarse de que el voltaje de salida sea 1,8V. 5. Si el voltaje no es 1,8V, ajustar el tornillo de manera que el voltaje de salida se 1,8V. (Contravoltaje)

CHANGES

REPLACEMENT PARTS LIST

Notes:

1. Mentioned in this parts list are only those changed in Model No. SL-Q6 for destination [M] area.
2. Important safety notice:
Components identified by Δ mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.
3. The "S" mark is service standard parts and may differ from production parts.
4. $\textcircled{K}$ -marked parts are used for black only, while $\textcircled{O}$ -marked parts are for silver type only.
5. Parts other than $\textcircled{K}$ - and $\textcircled{O}$ -marked are used for both black and silver types.
6. This replacement parts list contains the main parts changed from those of former types. For the detailed replacement parts list, refer to pages 15, 16

Areas

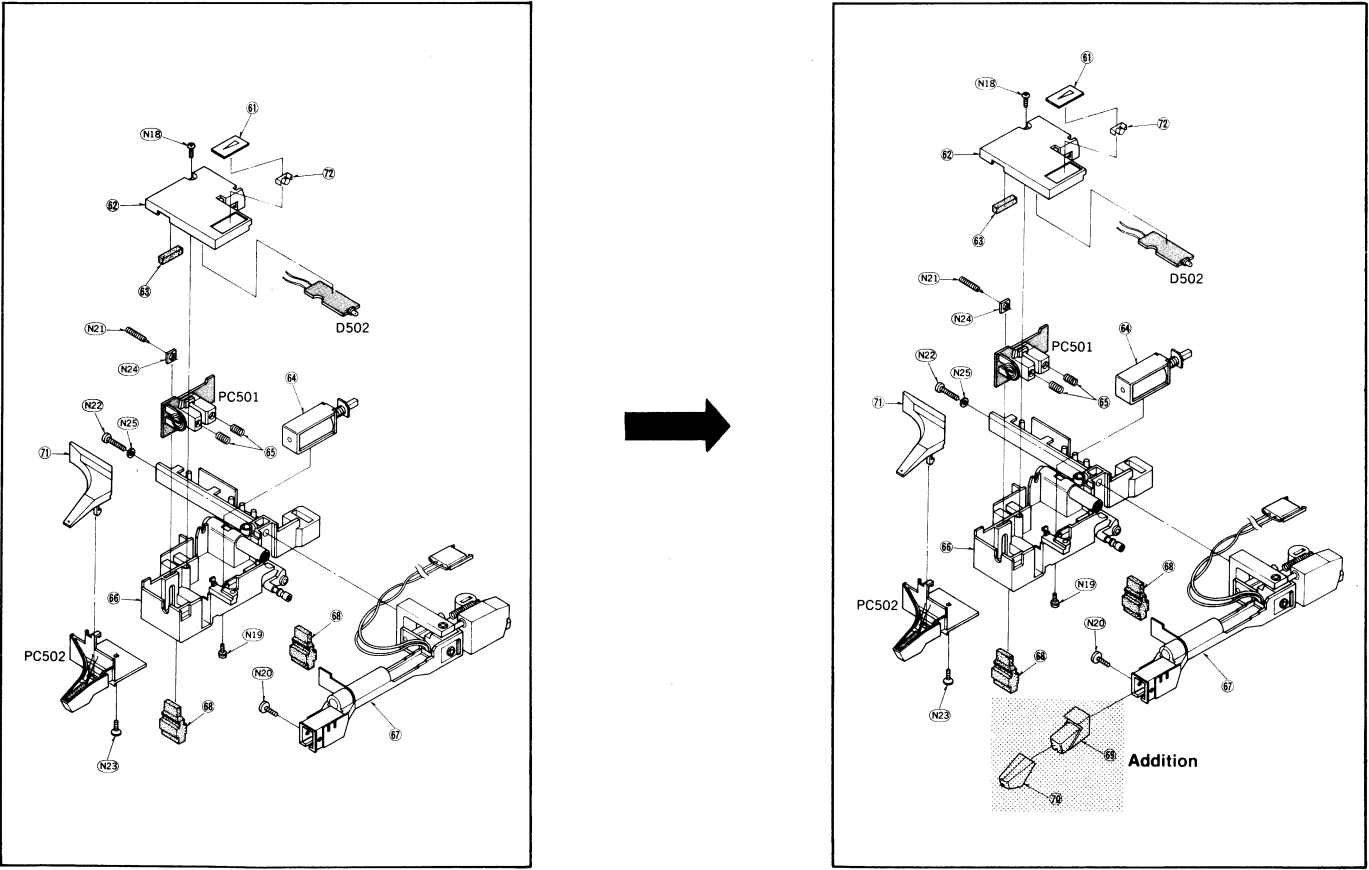
- * [E] is available in Switzerland and Scandinavia.
* [EK] is available in United Kingdom.
* [XL] is available in Australia.
* [EG] is available in F.R. Germany.
* [EB] is available in Belgium.
* [EH] is available in Holland.
* [EF] is available in France.
* [Ei] is available in Italy.
* [EC] is available in Czechoslovakia.
* [XA] is available in Southeast Asia, Oceania, Africa, Middle Near East and Central South America.
* [XM] is available in Central South America.
* [PA] is available in far East PX.
* [PE] is available in European Military.
* [PC] is available in European Audio Club.

Black type model No. : SL-Q6 (K)

Ref. No.	Change of Part No.		Part Name & Description	Per Set (Pcs.)	Remarks
	SL-Q6 [M]	SL-Q6 / (K)			
SWITCH					
S901	Addition	SFDSHXW225—2 [EK, XA, XM, PA, PE and PC areas]	Voltage Selector	1	⚠
POWER TRANSFORMER					
T1	SLT48DTL3A	SLT57DT7E [EK, XA, XM, PA, PE and PC areas]	Power Source	1	⚠
		SLT48DTE13E [XL]	Power Source	1	⚠
		SLT48DT10E [Other areas]	Power Source	1	⚠
FUSES					
F1	Addition	XBA2C02T1B [EK, XA, XM, PA, PE and PC areas]	250V, T200mA	1	⚠
		XBA2C05T1B [Other areas]	250V, T500mA	1	⚠
F2	Addition	XBA2C06T1B [EK, XA, XM, PA, PE and PC areas]	250V, T630mA	1	⚠
CABINET and CHASSIS PARTS					
1	SFADQ06N01E	SFADQ06N01E ○	Dust Cover (Silver)	1	
		SFADQ06N21E (K)	Dust Cover (Black)	1	
3	SFUMQ06N08	SFUMQ06N08 ○	Latch, Dust Cover (Silver)	2	
		SFUMQ06N22 (K)	Latch, Dust Cover (Black)	2	
4	SFUMD04N07	SFUMD04N07 ○	Latch, Dust Cover (Silver)	2	
		SFUMC02N14 (K)	Latch, Dust Cover (Black)	2	
5	SFGZQ06N01	SFGZQ06N01 ○	Rubber, Latch	2	
		SFGZC02N01 (K)	Rubber, Latch	2	
15	SJT345	SJT347 [EK, XA, XM, PA, PE and PC areas]	Holder, Fuse	4	
		SJT347 [Other areas]	Holder, Fuse	2	
17	SFUMQ06N10A	SFUMQ06N10A ○	Front Panel (Silver)	1	
		SFUMQ06N21A (K)	Front Panel (Black)	1	
19	SFACQ06N01	SFACQ06N01 ○	Cabinet (Silver)	1	
		SFACQ06N21 (K)	Cabinet (Black)	1	
20	SFGCQ06N02	SFGCQ06N02 [EK, XA, XM, PA, PE and PC areas]	Cushion Rubber, Power Transformer	2	
		SFGCQ06N02 [Other areas]	Cushion Rubber, Power Transformer	2	
21	SFDJHSC0491	SFDJHSC04912 [XA, XM]	Socket, AC Cord	1	⚠
		SFDJHSC0491 [XL]	Socket, AC Cord	1	⚠
		SFDJHSC0498 [Other areas]	Socket, AC Cord	1	⚠
23	SFNNQ06M01	SFNNQ06S01 [E, EC]	Name Plate	1	
		SFNNQ06G01 [EK]	Name Plate	1	
		SFNNQ06X01 [XA, XM]	Name Plate	1	
		SFNNQ06P01 [PA, PE]	Name Plate	1	
		SFNNQ06P02 [PC]	Name Plate	1	
		SFNNQ06R01 [Other areas]	Name Plate	1	

Ref. No.	Change of Part No.		Part Name & Description	Per Set (Pcs.)	Remarks
	SL-Q6 [M]	→ SL-Q6 / (K)			
TONEARM PARTS					
69	Addition	EPC—P28AK [PA, PE, PC]	★ Cartridge	1	
		EPC—P33AK [Other areas]	★ Cartridge	1	
70	Addition	EPS—28ES [PA, PE, PC]	★ Stylus	1	
		EPS—33ES [Other areas]	★ Stylus	1	
ACCESSORIES					
A1	SFNUQ06M01	SFNUQ06I01 [Ei]	Instruction Book	1	
		SFNUQ06G01 [EK]	Instruction Book	1	
		SFNUQ06X01 [XL, XA, XM]	Instruction Book	1	
		SFNUQ06R01 [EG]	Instruction Book	1	
		SFNUQ06F01 [EF]	Instruction Book	1	
		SFNUQ06P01 [PA, PE, PC]	Instruction Book	1	
		SFNUQ06S01 [Other areas]	Instruction Book	1	
A4	SFDAC05M01	SFDAC05G02 [EK]	AC Cord	1	⚠
		SFDAC05L01 [XL]	AC Cord	1	⚠
		SFDAC05X02 [XA, XM]	AC Cord	1	⚠
		SFDAC05N01 [PA, PE, PC]	AC Cord	1	⚠
		SFDAC05E02 [Other areas]	AC Cord	1	⚠
A5	Addition	SFDK111918 [XA, XM]	2 Pin Plug	1	⚠
A6	Addition	QJP0603S [PA, PE, PE]	Adaptor, Gimens	1	⚠
PACKING PARTS					
P1	SFHPQ06M01	SFHPQ06C01 [EF] ○	Carton Box (Silver)	1	
		SFHPQ06M01 [Other areas] ○	Carton Box (Silver)	1	
		SFHPQ06C21 [EF] (K)	Carton Box (Black)	1	
		SFHPQ06M21 [Other areas] (K)	Carton Box (Black)	1	

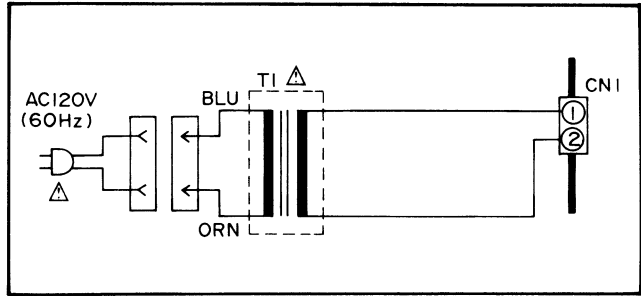
EXPLODED VIEW



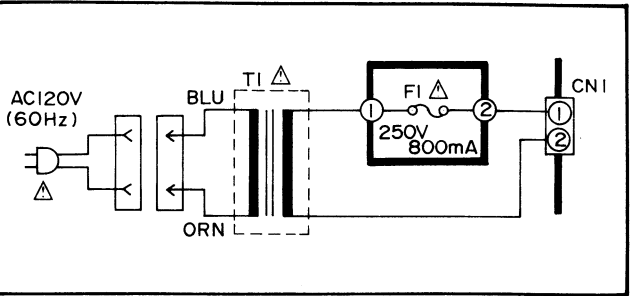
SCHEMATIC DIAGRAM

Power source circuit

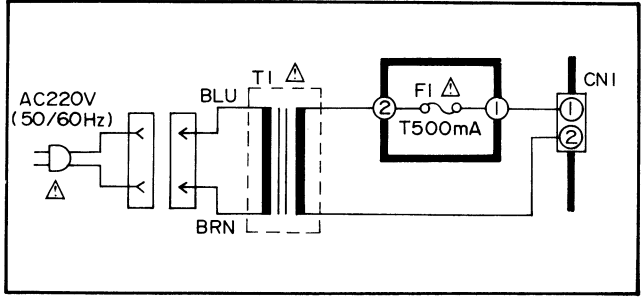
Product for U.S.A.



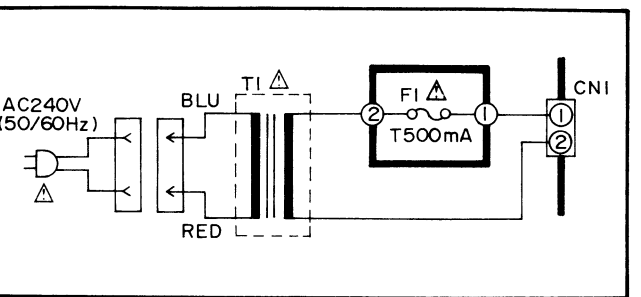
Product for Canada.



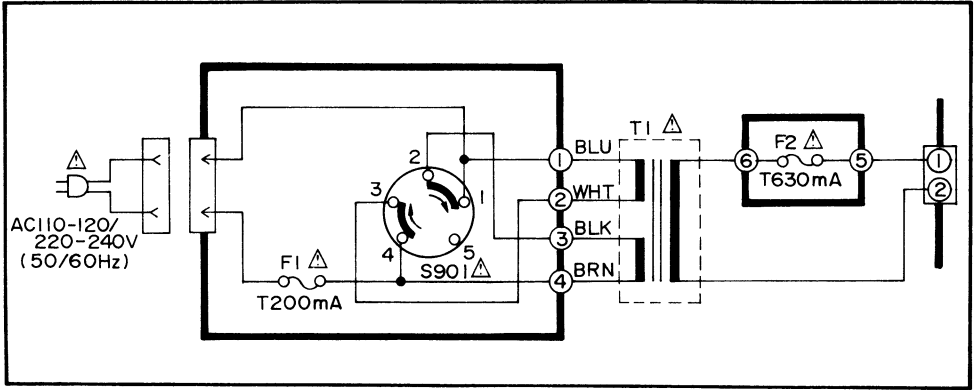
Product for continental Europe



Product for Australia.



Product for United Kingdom, Southeast Asia, Oceania, Africa, Middle Near East and Central South America.



■ RESISTORS AND CAPACITORS

- Notes:** 1. Part numbers are indicated on most mechanical parts. Please use this part number for parts orders.
2. Important safety notice:
Components identified by Δ mark have special characteristics important for safety. When replacing any of these components use only manufacturer's specified parts.
3. This "S" mark is service standard parts and may differ from production parts.

Numbering System of Resistor

Example

ERD	25	F	J	101
Type	Wattage	Shape	Tolerance	Value
ERG	1	AN	J	2R2
Type	Wattage	Shape	Tolerance	Value

Numbering System of Capacitor

Example

ECKD	1H	102	Z	F
Type	Voltage	Value	Tolerance	Peculiarity
ECEA	50	M	R47	R
Type	Voltage	Peculiarity use	Value	Special use

Resistor Type	Wattage	Tolerance
ERD : Carbon	25 : 1/4W	F : $\pm 1\%$
ERG : Metal Oxide	1 : 1W	J : $\pm 5\%$
ERX : Metal Film	2 : 2W	G : $\pm 2\%$

ERD2FCG□□□ → Fuse type carbon (1/4W)
ERD10TLJ□□□ → Chip type carbon (1/8W)
ECUV1H□□□ → Chip type ceramic capacitor
ERDS2TJ□□□ → Small type carbon (1/4W)

Ref. No.	Part No.	Value	Ref. No.	Part No.	Value	Ref. No.	Part No.	Value	Ref. No.	Part No.	Value
RESISTORS											
RF1	Δ ERD2FCG180	18	R342	ERDS2TJ471	470	R811	ERDS2TJ684	680K	C205	ECUV1H330JCM	33P
R1	ERDS2TJ101	100	R343	ERDS2TJ103	10K	R812	ERDS2TJ223	22K	C206	ECUV1H101JCM	100P
R2	ERDS2TJ221	220	R345	ERDS2TJ472	4.7K	R813	ERDS2TJ104	100K	C207	$\textcircled{S}$ ECEA0JU470	47
R3	ERG2SJ330	33	R346	ERDS2TJ333	33K	R814	ERDS2TJ684	680K	C208	$\textcircled{S}$ ECEA1AU470	47
R4	ERDS2TJ221	220	R347	ERDS2TJ563	56K	R815	ERDS2TJ224	220K	C301	ECDD1H221K	220P
R103	ERD10TLJ104	100K	R348	ERDS2TJ333	33K	R816	ERDS2TJ221	220	C302	$\textcircled{S}$ ECQM1H104JZ	0.1
R104	ERX1ANJ270	2.7	R351	ERDS2TJ471	470	R817	ERDS2TJ104	100K	C303	ECFR1H104ZF	0.1
R105	ERD10TLJ270	27	R352	ERDS2TJ472	4.7K	R818	ERDS2TJ102	1K	C304	$\textcircled{S}$ ECEA0JU330	33
R201	ERD10TLJ393	39K	R353	ERDS2TJ222	2.2K	R819	ERDS2TJ470	47	C305	$\textcircled{S}$ ECEA1CU221	220
R202	ERD10TLJ394	390K	R357	ERDS2TJ223	22K	R820	ERDS2TJ222	2.2K	C306	$\textcircled{S}$ ECEA1HU47R	4.7
R203	ERD10TLJ680	68	R358	ERDS2TJ333	33K	R821	ERDS2TJ272	2.7K	C307	ECFR1H104ZF	0.1
R204	ERD10TLJ151	150	R359	ERDS2TJ471	470	R822	ERDS2TJ220	22	C309	ECFR1H104ZF	0.1
R205	ERD10TLJ223	22K	R360	ERDS2TJ683	68K	R823	ERDS2TJ103	10K	C401.402	$\textcircled{S}$ ECQM1H223JZ	0.022
R207	ERD10TLJ102	1K	R401	ERDS2TJ683	68K	R824	ERDS2TJ472	4.7K	C403	ECQM1H224JZ	0.22
R208	ERD10TLJ680	68	R402	ERDS2TJ222	2.2K	R825	ERDS2TJ103	10K	C601	ECFB1B104ZM	0.1
R320	ERDS2TJ333	33K	R403	ERDS2TJ102	1K	R826	ERDS2TJ332	3.3K	C701	$\textcircled{S}$ ECEA1CU101	100
R321	ERDS2TJ471	470	R404	ERDS2TJ224	220K	R827	ERDS2TJ101	100	C801	$\textcircled{S}$ ECQM1H103JZ	0.01
R322	ERDS2TJ102	1K	R405	ERDS2TJ683	68K	R828	ERDS2TJ394	390K	C802.803	$\textcircled{S}$ ECQM1H104JZ	0.1
R323	ERDS2TJ333	33K	R406	ERDS2TJ222	2.2K	R829.830	ERDS2TJ333	33K	C804	$\textcircled{S}$ ECEA1CU220	22
R324	ERDS2TJ222	2.2K	R407	ERDS2TJ102	1K	R831	ERDS2TJ222	2.2K	C805	$\textcircled{S}$ ECEA1CU470	47
R325	ERDS2TJ103	10K	R408	ERDS2TJ224	220K	CAPACITORS					
R326	ERDS2TJ472	4.7K	R409	ERDS2TJ273	27K	C1.2	Δ ECQM1223KZ	0.022	C806	$\textcircled{S}$ ECEA50M1R	1
R327	ERDS2TJ223	22K	R410	ERDS2TJ103	10K	C3	Δ ECQM1223KZ	0.022			
R328	ERDS2TJ103	10K	R501	$\textcircled{S}$ ERD25FJ271	270	C4	$\textcircled{S}$ ECEB1EU222	2200			
R329	ERDS2TJ222	2.2K	R502	$\textcircled{S}$ ERD25FJ391	390	C5	$\textcircled{S}$ ECEA1CU330	33			
R331	ERDS2TJ102	1K	R503	$\textcircled{S}$ ERD25FJ561	560	C101	$\textcircled{S}$ ECEA1CU330	33			
R334.335	ERDS2TJ331	330	R801	ERDS2TJ154	150K	C102	$\textcircled{S}$ ECEA50ZR22	0.22			
R336	ERDS2TJ103	10K	R802	ERDS2TJ272	2.7K	C103	ECQV05274JZ	0.27			
R337	ERDS2TJ223	22K	R803	ERDS2TJ154	150K	C105.106	Δ ECEA1CN470S	47			
R338	ERDS2TJ272	2.7K	R805	ERDS2TJ222	2.2K	C107	$\textcircled{S}$ ECEA50Z1	1			
R339	ERDS2TJ561	560	R806	ERDS2TJ472	4.7K	C201	$\textcircled{S}$ ECEA0JU470	47			
R340	ERDS2TJ681	680	R807	ERDS2TJ332	3.3K	C202	$\textcircled{S}$ ECEA50ZR22	0.22			
R341	ERDS2TJ563	56K	R808	ERDS2TJ682	6.8K	C203	$\textcircled{S}$ ECQM1H683JZ	0.068			
			R809	ERDS2TJ102	1K	C204	ECUV1H121JCM	120P			
			R810	ERDS2TJ103	10K						

■ REPLACEMENT PARTS LIST

- Notes:** 1. Part numbers are indicated on most mechanical parts. Please use this part number for parts orders.
2. Important safety notice:
Components identified by Δ mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.
3. Bracketed indications in Ref. No. columns specify the area. Parts without these indications can be used for all areas.
4. The "S" mark is service standard parts and may differ from production parts.
5. The parenthesized numbers in the columns of description stand for the quantity per set.
6. (K)-marked parts are used for black only, while (O)-marked parts are for silver type only.
7. Parts other than (K) - and (O)-marked are used for both black and silver types.

Areas

- * [E] is available in Switzerland and Scandinavia.
- * [EK] is available in United Kingdom.
- * [XL] is available in Australia.
- * [EG] is available in F.R. Germany.
- * [EB] is available in Belgium.
- * [EH] is available in Holland.
- * [EF] is available in France.
- * [Ei] is available in Italy.
- * [EC] is available in Czechoslovakia.
- * [XA] is available in Southeast Asia, Oceania, Africa, Middle Near East and Central South America.
- * [XM] is available in Central South America.
- * [PA] is available in far East PX.
- * [PE] is available in European Military.
- * [PC] is available in European Audio Club.

Black type model No. : SL-Q6 (K)

Ref. No.	Part No.	Description
INTEGRATED CIRCUITS		
IC1	SVIUPC7812H	Regulator
IC101	AN6637	Turtable Drive
IC201	AN6683	Turntable Control
IC301	MN1425FPJ	Micro Computer
IC401	AN6552F	Tonearm Motor Control
IC801	AN6562	Blank Groov Detection
IC802	AN6912	Comparator
TRANSISTORS		
Q1	$\textcircled{S}$ 2SC1383Q	Regulator
Q301.302	2SD636	Switching,Muting Drive
Q303.304	2SD636	Cueing Control
Q305	2SB641	Offset Angle Detection
Q306	2SD636	Offset Angle Detection
Q307.308.309	2SB641	Switching, Weaveform Sharpening
Q312	2SD636	Switching
Q401.402	$\textcircled{S}$ 2SD973S	Tonearm Motor Control
Q403.404	2SD638	Tonearm Motor Control
Q801	2SB641	Switching
Q802	2SD636	Switching
Q803	2SB641	Switching
DIODES		
D1	Δ $\textcircled{S}$ SVDS1RBA20Z	Rectifier
D2	MA4056	5.6V Zener
D301~308	SVDZQ06N02	Program/Repeat Indicator
D312~317	MA165	Switching
D319	MA4075	7.5V Zener
D320	SVDZQ06N02	Cueing Up Indicator
D321	SVDZQ06N03	Cueing Down Indicator
D322.323	MA165	Switching
D501	$\textcircled{S}$ MA162A	Switching

Ref. No.	Part No.	Description
D502	SVDEBR3432S	Tonearm Potition Indicator
D701	MA165	Switching
D801.802	MA165	Switching
D803	MA4047	4.7V Zener
D804	MA165	Switching
D806	MA4075	7.5V Zener
HALL ELEMENTS		
H101.102	OH-002	Turntable Position Detection
CRYSTAL		
X201	SVQSH41TR	4.193MHz
SWITCHES		
SI	Δ SFDSC02N02	Power(On/Off)
S301~312	EVQQS405K	Program,Cueing Repeat,Start and Stop
S315	SFDSHSW0699	Speed Selector
S601	SFDS02N03	Rest Switch
S701	SFDS05N01	Reset
S801.802	SFDSHSW0699	Sensor Sensitivity
S901	SFDSHXW225-2	Voltage Selector
PHOTO INTERRUPTERS		
PC501	ON1186	Offset Angle Detection
PC502	ON2168	Blank Groov Detection
PC601	ON1161	Tonearm Position Detection
VARIABLE RESISTORS		
VR301	EVN61AA00B54	Clock Frequency Adjustment
VR302	EVJEDAF20B54	50K Ω B
VR501	$\textcircled{S}$ EVNMOAA00B53	Cueing Down Positon
VR901.902	EVN58AA00B15	Adjustment 50K Ω B
		Servo Gain
		Adjustment 5K Ω B
		Sensor Resolution 100K Ω B

Ref. No.	Part No.	Description
RELAY		
RL701	SFDYQ11N02	Muting
POWER TRANSFORMER		
T1(EK,PA,PE,PC,XA,XM)	SLT57DT7E	Power Source
T1(XL)	SLT48DTE13E	Power Source
T1(Other Areas)	SLT48DT10E	Power Source
FUSES		
F1(EK,XA,XM,PA,PE,PC)	XBA2C02T1B	250V,T200mA
F1(Other Areas)	XBA2C05T1B	250V,T500mA
F2(EK,XA,XM,PA,PE,PC Only)	XBA2C06T1B	250V,T630mA
COMPONENT COMBINATIONS		
Z301.302	EXBT44471K	470 Ω $\times$ 4
Z303	EXBP84333K	33K Ω $\times$ 4
Z304	EXBP84103K	10K Ω $\times$ 4
Z305	EXBP84332K	3.3K Ω $\times$ 4
Z306	EXBP86122J	1.2K Ω $\times$ 6

Ref. No.	Part No.	Description
CABINET AND CHASSIS P		
1	$\textcircled{O}$ SFADQ06N01E	
1	$\textcircled{K}$ SFADQ06N21E	
2	SFKKQ06N03	
3	$\textcircled{O}$ SFUMQ06N08	
3	$\textcircled{K}$ SFUMQ06N22	
4	$\textcircled{O}$ SFUMD04N07	
4	$\textcircled{K}$ SFUMC02N14	
5	$\textcircled{O}$ SFGZQ06N01	
5	$\textcircled{K}$ SFGZC02N01	
6	SFGZD04N01	
7	SFTGQ06N01	
8	SFWEC06N01	
9	SFQAC06N01	
10	SFTEQ05N01	
11	SFTMC07-01E	
12	SFQCC05N01	
13	SFGAC05N02	
14	SFAUQ06N01	
15	[EK,PA,PE,PC,XA,XM]	SJT347
15	[Other Areas]	SJT347
16	SFUMQ06N05	
17	$\textcircled{O}$ SFUMQ06N10A	
17	$\textcircled{K}$ SFUMQ06N21A	
17-1	SFKKQ06N02	
17-2	SFKKQ06N01	
17-3	SFUZQ06N02	
17-4	SFUZQ06N03	
18	SFKTC06N04	
19	$\textcircled{O}$ SFACQ06N01	
19	$\textcircled{K}$ SFACQ06N21	
20	[EK,PA,PE,PC,XA,XM]	SFGCQ06X01
20	[Other Areas]	SFGCQ06N02
21	[XA,XM]	SFDJHSC04912
21	[XL]	SFDJHSC0491
21	[Other Areas]	SFDJHSC0498
22	SFATQ06N01E	
23	[E,EC]	SFNNQ06S01
23	[EK]	SFNNQ06G01
23	[XA,XM]	SFNNQ06X01
23	[PA,PE]	SFNNQ06P01
23	[PC]	SFNNQ06P02
23	[Other Areas]	SFNNQ06R01
24	SFGKQ06N01	
25	SFUML11R03	
26	SFUZC05N02E	
27	SFUMV05N23	
28	SFUMC05N22	
29	SFGBC10-01	

REPLACEMENT PARTS LIST

- Notes:**
- Part numbers are indicated on most mechanical parts. Please use this part number for parts orders.
 - Important safety notice:
Components identified by Δ mark have special characteristics important for safety.
When replacing any of these components, use only manufacturer's specified parts.
 - Bracketed indications in Ref. No. columns specify the area. Parts without these indications can be used for all areas.
 - The "S" mark is service standard parts and may differ from production parts.
 - The parenthesized numbers in the columns of description stand for the quantity per set.
 - (K)-marked parts are used for black only, while (O)-marked parts are for silver type only.
 - Parts other than (K) - and (O)-marked are used for both black and silver types.

Areas

- * [E] is available in Switzerland and Scandinavia.
- * [EK] is available in United Kingdom.
- * [XL] is available in Australia.
- * [EG] is available in F.R. Germany.
- * [EB] is available in Belgium.
- * [EH] is available in Holland.
- * [EF] is available in France.
- * [Ei] is available in Italy.
- * [EC] is available in Czechoslovakia.
- * [XA] is available in Southeast Asia, Oceania, Africa, Middle Near East and Central South America.
- * [XM] is available in Central South America.
- * [PA] is available in far East PX.
- * [PE] is available in European Military.
- * [PC] is available in European Audio Club.

Black type model No. : SL-Q6 (K)

Ω , M = 1000k Ω
 μ F, P = 10⁻⁶ μ F.

Tolerance
J : $\pm 5\%$ K : $\pm 10\%$ Z : $+80\%, -20\%$ P : $+100\%, -0\%$ M : $\pm 20\%$

Part No.	Value
ECUV1H330JCM	33P
ECUV1H101JCM	100P
ECU00JU470	47
ECU00JU470	47
ECU00H221K	220P
ECU00H104JZ	0.1
ECU00H104ZF	0.1
ECU00JU330	33
ECU00CU221	220
ECU00HU4R7	4.7
ECU00H104ZF	0.1
ECU00H104ZF	0.1
ECU00H1223JZ	0.022
ECU00H1224JZ	0.22
ECU00B104ZM	0.1
ECU00CU101	100
ECU00H103JZ	0.01
ECU00H104JZ	0.1
ECU00CU220	22
ECU00CU470	47
ECU00A50M1R	1

Ref. No.	Part No.	Description
INTEGRATED CIRCUITS		
IC1	SUIUPC7812H	Regulator
IC101	AN6637	Turntable Drive
IC201	AN6683	Turntable Control
IC301	MN1425FPJ	Micro Computer
IC401	AN6552F	Tonearm Motor Control
IC801	AN6562	Blank Groov Detection
IC802	AN6912	Comparator
TRANSISTORS		
Q1	2SC1383Q	Regulator
Q301,302	2SD636	Switching,Muting Drive
Q303,304	2SD636	Cueing Control
Q305	2SB641	Offset Angle Detection
Q306	2SD636	Offset Angle Detection
Q307,308,309	2SB641	Switching, Weaveform Sharpening
Q312	2SD636	Switching
Q401,402	2SD973S	Tonearm Motor Control
Q403,404	2SD638	Tonearm Motor Control
Q801	2SB641	Switching
Q802	2SD636	Switching
Q803	2SB641	Switching
DIODES		
D1	SVDS1RBA20Z	Rectifier
D2	MA4056	5.6V Zener
D301~308	SVDZQ06N02	Program/Repeat Indicator
D311	MA165	Switching
D312~317	MA4075	7.5V Zener
D319	SVDZQ06N02	Cueing Up Indicator
D320	SVDZQ06N03	Cueing Down Indicator
D321	SVDZQ06N03	Cueing Down Indicator
D322,323	MA165	Switching
D501	MA162A	Switching

Ref. No.	Part No.	Description
D502	SVDEBR3432S	Tonearm Potition Indicator
D701	MA165	Switching
D801,802	MA165	Switching
D803	MA4047	4.7V Zener
D804	MA165	Switching
D806	MA4075	7.5V Zener
HALL ELEMENTS		
H101,102	OH-002	Turntable Position Detection
CRYSTAL		
X201	SVQSH41TR	4.193MHz
SWITCHES		
SI	SFDSC02N02	Power(On/Off)
S301~312	EVQQS405K	Program,Cueing Repeat,Start and STop
S315	SFDSHSW0699	Speed Selector
S601	SFDSC02N03	Rest Switch
S701	SFDSC05N01	Reset
S801,802	SFDSHSW0699	Sensor Sensitivity
S901	SFDSHXW225-2	Voltage Selector
PHOTO INTERRUPTERS		
PC501	ON1186	Offset Angle Detection
PC502	ON2168	Blank Groov Detection
PC601	ON1161	Tonearm Position Detection
VARIABLE RESISTORS		
VR301	EVN61AA00B54	Clock Frequency Adjustment
VR302	EVJEDAF20B54	50K Ω B) Cueing Down Positon
VR501	EVNMOAA00B53	Adjustment 50K Ω B) Servo Gain
VR901,902	EVN58AA00B15	Adjustment 5K Ω B) Sensor Resolution

Ref. No.	Part No.	Description
RELAY		
RL701	SFDYQ11N02	Muting
POWER TRANSFORMER		
T1	SLT57D7E	Power Source
T1(XL)	SLT48DE13E	Power Source
T1(Other Areas)	SLT48DT10E	Power Source
FUSES		
F1	XBA2C02T1B	250V,T200mA
F1(Other Areas)	XBA2C05T1B	250V,T500mA
F2	XBA2C06T1B	250V,T630mA
COMPONENT COMBINATIONS		
Z301,302	EXBT44471K	470 Ω X4
Z303	EXBP84333K	33K Ω X4
Z304	EXBP84103K	10K Ω X4
Z305	EXBP84332K	3.3K Ω X4
Z306	EXBP86122J	1.2K Ω X6

Ref. No.	Part No.	Description
CABINET AND CHASSIS PARTS		
1	SFADQ06N01E	Dust Cover (1)
1	SFADQ06N21E	Dust Cover (1)
2	SFKKQ06N03	Record Groove Scale Plate (1)
3	SFUMQ06N08	Latch,Dust Cover (2)
3	SFUMQ06N22	Latch,Dust Cover (2)
4	SFUMD04N07	Latch,Dust Cover (2)
4	SFUMC02N14	Latch,Dust Cover (2)
5	SFGZQ06N01	Rubber,Latch (2)
5	SFGZC02N01	Rubber,Latch (2)
6	SFGZD04N01	Cushion Rubber, Dust Cover (2)
7	SFTGQ06N01	Turntable Mat (1)
8	SFWEC06N01	45 r.p.m.Adaptor (1)
9	SFQAC06N01	Spring,45r.p.m.Adaptor (1)
10	SFTEQ05N01	Turntable Platter (1)
11	SFTMC07-01E	Rotate Magnet, Turntable Platter (1)
12	SFQCC05N01	Spring,Insulator (4)
13	SFGAC05N02	Insulator (4)
14	SFAUQ06N01	Bottom Board (1)
15	SJT347	Holder,Fuses (4)
15	SJT347	Holder,Fuses (2)
16	SFUMQ06N05	Holder,L.E.D (3)
17	SFUMQ06N10A	Front Panel (1)
17	SFUMQ06N21A	Front Panel (1)
17-1	SFKKQ06N02	Surface Plate (1)
17-2	SFKKQ06N01	Badge (1)
17-3	SFUZQ06N02	SheetA),L.E.D (1)
17-4	SFUZQ06N03	SheetB),L.E.D (1)
18	SFKTC06N04	Knob,On/Off Switch (1)
19	SFACQ06N01	Cabinet (1)
19	SFACQ06N21	Cabinet (1)
20	SFGCQ06X01	Cushion Rubber, Power Transformer (2)
20	SFGCQ06N02	Cushion Rubber, Power Transformer (2)
21	SFDJHSC04912	Socket,A.C.Cord (1)
21	SFDJHSC0491	Socket,A.C.Cord (1)
21	SFDJHSC0498	Socket,A.C.Cord (1)
22	SFATQ06N01E	Hinge (2)
23	SFNNQ06S01	Name Plate (1)
23	SFNNQ06G01	Name Plate (1)
23	SFNNQ06X01	Name Plate (1)
23	SFNNQ06P01	Name Plate (1)
23	SFNNQ06P02	Name Plate (1)
23	SFNNQ06R01	Name Plate (1)
24	SFGKQ06N01	Rubber Cap (1)
25	SFULM11R03	Wheel,Tonearm Drive (1)
26	SFUZC05N02E	Rope Ass'y, Tonearm Drive (1)
27	SFUMV05N23	Cap,Pulley (1)
28	SFUMC05N22	Pulley (1)
29	SFGBC10-01	Belt,Tonearm Drive Motor (1)

Ref. No.	Part No.	Description
30	SFMHC02N02R	Motor Ass'y, Tonearm Drive (1)
31	SFUZC02N01	Rrd,Tonearm Drive (1)
32	SFQHQ34N22	Spring,Rest Switch Lever (1)
33	SFUMC02N05	Lever,Rest Switch (1)
34	SFUMC02N06	Base,Rest Switch (1)
35	SFUMQ06N09	Holder,Rest Switch (1)
36	SFUMQ06N06A	Worm Gear Ass'y (1)
37	SFUPBL3N11E	Base,Tonearm Drive Motor (1)
38	SFACQ05N13	Cover,Lead Wires (1)
39	SFKTQ06N02	Knob,Cueing Down Position (1)
40	SFQPC05N01	Spring,Reset Switch (1)
41	SFUMC02N10	Rope Guide (1)
42	SFUMQ06N07	Clamper,Guide Rail (1)
43	SFGCQ06N01	Cushion Rubber, Guide Rail (1)
44	SFGCC05N05	Cushion Rubber, Guide Rail (1)
45	SFUMC02N12	Holder,Lead Wires (1)
46	SFXJQ06N01	Guide Rail, Tonearm Drive (1)
47	SFUKQ06N01E	Base Ass'y,Tonearm Knob, Size/Sensor/Speed (1)
50	SFMZC06N01R	Stator Frame Ass'y (1)
51	SFMGQ34N01	Cover,Stator Coil (1)
52	SFQA913-01	Spring,Adjustment Screw (1)
53	SFACQ05N11	Cover,Adjustment Circuit Board (1)
54	SFDJD04N02	Jack,Synchro Recording (1)
55	SFUMC05N15	Holder,Reset Switch (1)
56	SFDJQ06N02	Jack,Phono Output (1)
57	SFGCQ06N03	Rubber,Dust Cover (2)
58	SFGZBL3N02	Spacer (1)
TONEARM PARTS		
61	SFPKQ06Q01	Indicator Plate (1)
62	SFPCS00Q01	Indicator Cover (1)
63	SFPGMQ06Q01	Rubber,L.E.D. Circuit Board (1)
64	SFDZC05N01E	Solenoid Ass'y (1)
65	SFSP00302	Spring,Adjustment (1)
66	SFPKQ00301R	Base,Tonearm (1)
67	SFPAMQ06Q01A	Tonearm Ass'y (1)
68	SFPGML1101	Cushion Rubber (2)
69	EPC-P28AK	★Cartridge (1)
69	EPC-P33AK	★Cartridge (1)
70	EPS-28ES	★Stylus (1)
70	EPS-33ES	★Stylus (1)
71	SFPAB0Q602	Cover,Sensor Case (1)
72	SFPCS00502	Light Concentrator (1)
SCREWS,WASHERS AND NUTS		
N1	XTV3+8BFN	Screw, $\pm 3 \times 8$ (17)
N2	XTV3+6BFN	Screw, $\pm 3 \times 6$ (4)
N3	XTV3+8BFN	Screw, $\pm 3 \times 8$ (4)
N4	XTW3+14QFYR	Screw, $\pm 3 \times 14$ (4)
N5	XSN3+5S	Screw, $\pm 3 \times 5$ (3)
N6	XTV3+6BFZ	Screw, $\pm 3 \times 6$ (2)
N7	XTWS3+14TFZ	Screw, $\pm 3 \times 14$ (2)
N9	XTN16+10G	Screw, $\pm 16 \times 10$ (1)
N10	XSN3+30S	Screw, $\pm 3 \times 30$ (1)
N11	SFXGB33N01	Screw (2)
N12	CSTW3	Washer, $\phi 3$ (2)
N13	XWE3A8BW	Washer, $\phi 3$ (2)
N14	XWE3E10	Washer, $\phi 3$ (1)
N15	SFXWC06N02	Washer (1)
N17	XNC3HS	Nut, $\phi 3$ (1)
N18	XTN23+6JFZ	Screw, $\pm 2 \times 6$ (1)
N19	XYN2+C4FZ	Screw, $\pm 2 \times 4$ (1)

Ref. No.	Part No.	Description
N20	SFPEV0Q601	Screw,Cartridge (1)
N21	SFPTN00301	Screw (1)
N22	XSN3+12S	Screw, $\pm 3 \times 12$ (1)
N23	XTN26+6JFZ	Screw, $\pm 2 \times 6$ (1)
N24	SFXN623-1	Nut (1)
N25	XWA3B	Washer, $\phi 3$ (1)
N26	XTV3+20J	Screw, $\pm 3 \times 20$ (1)
ACCESSORIES		
A1	SFNUQ06I01	Instruction Book (1)
A1	SFNUQ06G01	Instruction Book (1)
A1	SFNUQ06X01	Instruction Book (1)
A1	SFNUQ06R01	Instruction Book (1)
A1	SFNUQ06F01	Instruction Book (1)
A1	SFNUQ06P01	Instruction Book (1)
A1	SFNUQ06S01	Instruction Book (1)
A2	SFDHC05N01	Phono Output Cord (1)
A3	SFDLC05N01	Ground Wire (1)
A4	SFDAC05G02	A.C.Cord (1)
A4	SFDAC05L01	A.C.Cord (1)
A4	SFDAC05X02	A.C.Cord (1)
A4	SFDAC05N01	A.C.Cord (1)
A4	SFDAC05E02	A.C.Cord (1)
A5	SFDK119118	2Pin Plug (1)
A6	QJP0603S	Adaptor (1)
PACKING PARTS		
P1	SFHPQ06C01	Carton Box (1)
P1	SFHPQ06M01	Carton Box (1)
P1	SFHPQ06C21	Carton Box (1)
P1	SFHPQ06M21	Carton Box (1)
P2	SFHHQ05N01	Pad,Front (1)
P3	SFHHQ05N02	Pad,Rear (1)
P4	SFHKQ05N01	Clamper,Turntable (1)
P5	SFHKQ06N01	Spacer,Tonearm (1)
P6	SFHSQ06N01	Spacer,Dust Cover (1)
P7	SFYH45X50	Polyethylene Bag,Unit (1)
P8	SFYH17X16	Polyethylene Bag, Accessories (1)
P9	SFHDQ06N01	Pad,Turntable Mat (1)
P10	SFYF33B35	Polyethylene Bag, Turntable Mat (1)
P11	SFHDQ06S01	Sheet (1)